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AMENDMENTS TO THE SPECIFICATION:

Please insert the following replacement paragraphs (clean versions):

Page 3, lines 3-13 - Replacement paragraph:

A primary disadvantage of conventional packaging approaches for high-speed optical transceivers is the length of the TO header pins 26 and the length of the bond wires 24. Current pulses propagating along the elongated TO header pins 26 emit electromagnetic interference (EMI), which may case difficulties passing PCC regulations. These elongated TO header pins may also act as receiving antennae and degrade the signal via crosstalk between the header pins and reception of other incoming EMI signals. Similarly, elongated TO header pins 26 result in distributed inductances that can limit modulation speeds and reduce pulse shape integrity.

Page 3, line 26 through Page 4, line 6 - Replacement paragraph:

Existing packaging techniques for high speed optoelectronic devices also suffer from high materials cost for assembly components such as for example the TO cans, butterfly packages, mini-DILs (mini-dual-in-line), etc. In addition, restrictive handling requirements for the TO header 22 create difficulties in automating the downstream assembly process so that the costs associated with automating the conventional assembly process are quite high. As a result, conventional packaging techniques incur excessive labor costs for what is typically a manual assembly process (manual lead forming and manual soldering of the OSAs (optical sub-assemblies) onto a substrate). The cost of conventional packaging approaches is further increased by the need for specialized equipment to weld the TO cap 16 to the TO header 22 in a hermetic atmosphere, as well as equipment to verify the integrity of the seal.

Page 4, lines 26 - 35 - Replacement paragraph:

In another aspect of the present invention an optical device packaging method and apparatus for mounting optoelectronic devices onto a substrate (as defined above) and affixing an enclosure to the substrate so as to protect the optoelectronic device from the surrounding environment further includes a fiber coupling assembly having a barrel which operably

D3 End

engages a fiber optical cable and an alignment guide structure for passively aligning the fiber coupling assembly to the optical device . In one aspect of the present invention the barrel of the fiber coupling assembly is non-cylindrical in cross-sectional shape.

Page 7, line 29 through page 8, line 7 - Replacement paragraph:

D4

The optoelectronic device 12 and power monitoring photodetector 14 may be electrically coupled to substrate 30 through a variety of techniques including , for example, flip-chip or BGA (ball grid array) mounting. A preferred embodiment of the present invention minimizes the length of the connections coupling the substrate 30 to the optoelectronic device 12 and the power monitoring photodetector 14. Minimizing the length of the electrical connections is most easily achieved through the utilization of a flip chip mounting technique, as is known in the art. When bond wires 24 are used to couple the substrate and the optoelectronic device, the wires 24 are preferably gold with a diameter in the range of approximately 15-25 μm.

Page 10, lines 8 - 14 - Replacement paragraph:

D5

In addition, the inner layers preferably include vias 47a and 47b that DC couple the respective ground planes 43 and 45 on each side of the signal 49 and Vcc51 for maximum EMI shielding. The impedance between signal 49 and signal ground 43 is preferably about 50 to 75 Ohms. In accordance with a preferred embodiment, the case ground 45 and signal ground 43 are not DC coupled for ESD (electro-static discharge) protection.